

## CLAIMS

We claim:

1. A method of reducing the level of noise created by a variable reluctance motor during operation, said method comprising the steps of:

providing an electrical current to a pair of phase modules of a first phase unit, one of said phase modules being on an opposite side of a stator from the other phase modules and forming part of an opposing phase module;

determining if the distance between each phase module and the stator is equal; and, if necessary,

adjusting the distance between each phase module and the stator until the distances are equal.

2. The method of reducing the level of noise created by a variable reluctance motor according to claim 1 wherein the steps of claim 1 are repeated for further including the step of applying an electrical current to a pair of coils of a second phase unit spaced from said first phase unit.

3. The method of reducing the level of noise created by a variable reluctance motor according to claim 1 wherein said determining step includes the step of measuring the noise level of the motor.

4. The method of reducing the level of noise created by a variable reluctance motor according to claim 2 wherein said adjusting step includes the step of changing a position of a plurality of positioning phase modules in contact with said stator.

5. The method of reducing the level of noise created by a variable reluctance motor according to claim 4 wherein said changing step includes advancing a threaded member into a shaft carrying at least a pair of said positioning phase modules.

6. A method of adjusting a variable reluctance motor in order to reduce a level of noise generated by said motor, said method comprising the steps of:

measuring an inductance of each of a pair of opposing coils in a phase unit of the motor; and

mechanically adjusting a distance between each phase module of said phase units and a stator positioned between said phase modules to achieve the same inductance in each of said coils.

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